- 4.2. Panel 8: Public Perspectives
- 4.2.1. Panel Chair:

Clyde Murley - Natural Resources Defense Council, Berkeley, CA

Presentation charts follow

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WIND POWER'S NICHE IN HAWAII: SOME THOUGHTS ABOUT ADVANCING THE PUBLIC INTEREST

Clyde Murley Natural Resources Defense Council

THE NEW ENERGY PLANNING STANDARD:

"EXTERNALITIES" JUST AS IMPORTANT TO ACCOUNT FOR AS "INTERNALITIES"

INTERPRETATION:

PUBLIC INTERESTS PUT ON A PAR WITH PRIVATE INTERESTS

OR

STOP HIDING THE REAL SOCIETAL COSTS OF ENERGY CHOICES

OUR CHALLENGE, VIS A VIS WIND, THEN:

APPLYING THE PROPER DEGREE OF PUBLIC IMPETUS TO THE ISSUE OF WIND DEVELOPMENT

KEY HURDLES:

- o <u>institutional inertia</u> -- most of our expertise and experience is in weighing private costs; institutions have grown up with this focus
- o <u>analytical/methodological</u> -- many important externalities are resistant to monetary quantification
- o <u>organizational</u> -- the private sector is inherently well organized and motivated around a single issue-- profitability--while the "public" is inherently dispersed, generally poorly funded, and to the extent organized, around multiple and diverse interests.

IN SUM:

THE "PLAYING FIELD" IS SIGNIFICANTLY TILTED IN FAVOR OF REPRESENTING PRIVATE OVER PUBLIC INTERESTS.

THE QUANTIFICATION / MONETIZATION ISSUE

- o quantifiability is <u>NOT</u> a measure of importance
- o resistance to quantification is <u>NOT</u> grounds for ignoring or for relegating to secondary importance
- o "unmasking" the true social costs of energy options is only partially a task of quantification
- o tools of analysis and decisionmaking processes need to be able to meaningfully integrate quantitative and qualitative information.
- o we know what the <u>wrong</u> value is for important but quantification-resistant concerns: ZERO

TYPICAL COST COUNTING BIASES

toward impacts that are: against those that are: global local 0 0 present or near term further into the future 0 0 indirect. direct 0 obvious, simple subtle, complex 0 0 certain less than certain 0 0 high probability low probability 0 0 readily quantifiable resistant to 0 0 quantification

THIS PATTERN OF BIAS CAN SKEW DECISION MAKING AWAY FROM THE PUBLIC INTEREST

SOME PITFALLS TO AVOID WHEN WEIGHING THE LOCAL/ACUTE ISSUES TOGETHER WITH THE BROAD/DEEP ISSUES

- o overemphasis on the local/acute issues
- o ignoring costs borne by those beyond Hawaii
- o discounting costs borne by future public (Hawaiian or other)
- o devaluing or ignoring low probability or uncertain events with high adverse consequences

LOCAL PUBLIC ACCEPTANCE ISSUES

LAND USE

- o ~15-45 acres per MW.
- o typically, only 5% of this dedicated to wind project
- o leaves 95% available for compatible land uses (e.g., livestock grazing, some agriculture)
- o no land used for fuel extraction, processing, transportation, disposal

LOCAL PUBLIC ACCEPTANCE ISSUES

AVIAN ISSUES

- o currently most prominent environmental concern for windpower: birds colliding with turbines
- o raptors affected disproportionately
- o nature and magnitude of impacts highly site specific
- o mitigation strategies for bird/turbine collisions being worked on
- o placing wind machines outside important flyways is obvious preventive mitigation strategy

LOCAL PUBLIC ACCEPTANCE ISSUES

<u>AESTHETICS</u>

- o visual
- o aural
 - o contextual

BROAD/DEEP ISSUES

- o resource depletion
- o pollution, ecological degradation
- o public health impacts
- o coincidence of benefits with costs
- o mitigability of impacts
- o respect for the "future public"
- o integrating global and local concerns
- o prudence in face of uncertainty
- o mitigability and reversibility of risks and impacts

WHEN THESE ARE TAKEN INTO ACCOUNT ALONG WITH LOCAL/ACUTE ISSUES, WIND COMPARES VERY FAVORABLY TO FOSSIL-FUEL RESOURCES.

MONETARY ESTIMATION OF ENVIRONMENTAL IMPACTS BY RESOURCE: PRELIMINARY, BUT NEVERTHELESS INSTRUCTIVE.....

RESOURCE ENVIRONMENTAL "COST" (\$ per Kwh)

COAL \$0.025 to 0.058

OIL \$0.027 to 0.067

SOLAR \$0 to 0.004

BIOMASS \$0 to 0.007

WIND \$0 to 0.001

ENERGY SO

ADVANCING THE PUBLIC INTEREST

SOME NECESSARY CONDITIONS:

- o technical and subject matter expertise
- o prior existence of appropriate policy and decisionmaking forums
- o extensive involvement in decisionmaking processes
- building consensus (w/ own group and with other stakeholders)
- o devise creative approaches
- o resources to achieve all of the above

PROBLEM: THESE CONDITIONS ARE SELDOM MET

"IN-STREAM" ASSESSMENT OF THE ADEQUACY OF REPRESENTATION OF THE PUBLIC INTEREST IN ADVANCING EXTERNALITIES DEBATE IN HAWAII ENERGY DECISION MAKING

- o severely "outcompeted" by the private interest
- o most externality concerns elevated in rhetoric, but largely inconsequential in actual decision making.
- o vis a vis wind power: institutional support is lagging behind public impetus
- o IRP is not a solution, but a framework whose potential has not yet been realized.

SOME AREAS IN NEED OF IMPROVEMENT

- better public access and funding for participation in regulatory and legislative processes
- o legislative and PUC public advisors
- stronger role for public in PUC's IRP advisory processes
- increased use of public/private collaborative processes
- o strong public education effort
- o redesigning analytical methodologies <u>and</u> decision processes to be accountable to the new standards of energy planning, namely, reasonably comprehensive accounting of all costs and benefits in pursuit of true, least-cost provision of energy services.

IN CLOSING:

- o Advancing the public interest entails:
 - > "global" analysis of costs and benefits
 - > resolving global/local externality conflicts
 - > good-faith integration of both quantified and unquantified externalities with private costs and benefits
 - overcoming institutional and organizational barriers faced by public advocates
- o Overall and generally, wind power is substantially superior to fossil-fuel-derived power from a public perspective.
- o The regulatory and legislative infrastructure is lagging behind the public interest in providing the necessary and appropriate impetus for accelerating wind development.
- The utility perspective strongly influences whether the public interest in wind development will be served.
- o IRP is not wind's--or the public's--salvation, at least not yet.

4.2.2 Panel Members

Scott Derrickson–Hawaii Energy Coalition Michael Jones–Union of Concerned Scientists (UCL) Ira Rohter–Green Party

Panel Responses

Michael Jones – Union of Concerned Scientists (UCS)

As a representative of UCS, Dr. Jones noted UCS's strong support of renewable energy and cited the organization's recent study, *Powering the Midwest*, which details the use of wind power and other renewables as options in the Midwest. In addition, UCS publishes monthly briefing papers for the nonacademic public which provide overall summaries of their programs and activities in the field of renewable energy.

UCS is also working to support sustainable resources and has recently formed the group, *ACTION for Global Sustainability*, to deal with environmental issues on a global scale.

However, Dr. Jones believes much work lies ahead in overcoming the public's skepticism of government that has evolved over the years. Referencing work that his organization has been involved in recently in assessing the reliability of environmental impact statements (EIS), Dr. Jones illustrated the public's justifiable skepticism toward government.

The EIS for the refurbished Polaris missiles used in the launching of the Star Wars Program from Kauai, gave these missiles a reliability rating of 97%. After gaining access to the documents that the EIS was based on, and the particular study that was used to calculate the reliability, it was found that the reliability rating was obtained only by assuming 100% reliability for the first and second stage rocket motors, which are the most critical components of this missile, Dr. Jones said.

"This is an example of hiding details that are crucially important to discussions about reliability," he said. "If one is quoting reliability of a wind turbine, one needs to say under what conditions that reliability rating was obtained. If there is actual operating data, say what that is."

Another incidence of the public's interests not being served involved the actual significance of the impact on Kauai. One of the rocket launch pads for the *Star Wars Project* was located on a site adjacent to an ancient Hawaiian burial ground, Nahili Dune, a fact the EIS felt was not a problem while the Hawaiian community felt it was a very serious problem indeed.

Dr. Jones outlined another example of a questionable EIS involving the storage of radioactive waste material on Oahu. In this situation, the EIS presupposes what would happen if a large aircraft smashed into one of the two containers of radioactive wastes

located at Pearl Harbor. According to the EIS evaluation, the risk of cancer would be increased by seven to eight cancer deaths as a result of the release of the radioactive matter. However, no actual statement was made of what the economic impact would be on the state of Hawaii as a result of the release of radioactive matter.

"It seems obvious to me that it would be pretty devastating," Dr. Jones said.

Cases like these, make it difficult for the public to maintain a trust in government. And for those who are trying to promote renewable energy, it is important to keep this in mind in dealing openly with the public.

"It is not a burden that you necessarily bring on yourself, but it is something that you will have to deal with," Dr. Jones said in closing. "It is sometimes said that nations do the right thing eventually but only after exhausting all other possibilities. I hope we can do better with wind power."

Scott Derrickson - Hawaii Energy Coalition

As a public advocate, Mr. Derrickson noted that he had to take time off from his gainful employment in order to participate in the Hawaii Windpower Workshop. He emphasized this to illustrate how difficult it is for the public to get involved in the policy decision making process.

In responding to what Clyde Murley had said, Mr. Derrickson urged the proponents of wind power to become proactive.

"You need to be on the front line pushing the development of tools to better address externalities because IRP requires it and because, wind energy has more positive externalities than the fossil fuels it is competing with to get on the grid," he said.

As Hawaii shifts toward an increase in the use of renewables, there is going to be a shift in the local impacts as well.

The state has been riding serendipitously because of its reliance on fossil fuels, and the impacts of that are not felt here locally. Biomass, a primary source of energy on the outer islands, is a byproduct of something that has a long-standing social acceptance here in Hawaii. As the sugar industry begins to phase out here, that source is also going to be phasing out. In shifting toward an increase in renewables, the general public will need to be educated about the impacts that will need to be taken locally, he said.

Although wind power only uses a small percentage of land area to generate electricity, there is still much room left for the development of compatible land uses. Proponents of wind power need to determine what those locally used compatible land uses might be and where they might be appropriate.

Mr. Derrickson disagreed with Mr. Murley's inference that the transmission corridor issues might be less of an issue here in Hawaii. The issue of whether transmission corridors should be located underground or not is becoming an increasingly debated concern here in Hawaii, he said.

The avoidance of sitings along flyways is a complex issue that needs to be addressed, hopefully through the Hawaii Energy Strategy. As far as noise impacts are concerned, technology is being developed and will soon be available that might mitigate this problem, he said.

Here in Hawaii, the issue of cultural impacts has increased with every single decision that involves large scale land use. Although wind power may occupy a small area of land, there is no way to avoid the cultural impact, he said. Wind power developments will tend to have a fence built up around large areas of land in order to keep the public out of the area. This is an especially important issue when it involves state lands that are part of the ceded land trust which will invoke considerable attention from the native Hawaiian population.

In the state government, there is a long history of noninvolvement or downright exclusion of public participation which is going to take a long time to overcome.

"For three or four years now, I've been involved in a number of workshops and forums that involved great effort on the part of government and the utilities to include the public in some meaningful way, but the public just does not come around too easily. It is going to take a long time to overcome this, partly because government does not have a whole lot of experience in meaningful public involvement. I think everyone is going to have to work hard to overcome this," he said.

In assessing the notion of a PUC intervener, Mr. Derrickson perceived this as a very good idea. An environmental ombudsman would serve both the general public's interests as well as government and the utilities interests by bringing a more focused public set of issues and concerns to the PUC and legislative processes.

Ira Robter – Green Party

As an outsider observing the proceedings of the workshop, Dr. Rohter found the basic question implied in the actual subtext of what was being said was, "How come so little has actually been done in implementing windpower if Hawaii is such an obvious place with its abundance of wind resources?"

In addressing that question, Dr. Rohter provided some answers to this question and drew some hopeful signs. To start off, he addressed the issue of policy making in Hawaii which, he said, represents an area of enormous lack of trust between the government and the general public. Decisions about land involve developers interests, a great deal of wheeling and dealing, the infamous good old boy network entrenched

in Hawaii, well organized self-interest groups and the big money always wins, he said.

The environmental impact statements are too often meaningless, superficial, and inaccurate examples of why people don't trust government.

Hawaii is a one party state, a statement evidenced by the narrow clique of people that have been in power over the past forty years with only a token representation of Republicans whose minority viewpoint is not taken seriously. The minority parties have in effect, no political clout, as such, no fresh ideas are injected into the governing system.

This legacy from the plantations days represents a colonialized mentality, where bosses make the rules and the peons simply obey, a practice deeply entrenched in the governing systems of this state. Decisions come down from the top and are passively accepted by the average person.

The we know best mentality permeates the thinking of top public officials in the state, city and county government. They reluctantly take citizen input and generally ignore major or important input from public interest groups. Government in Hawaii strongly resists the notion that the public and key stakeholders should be involved from the beginning of the project as equal partners, he contended.

"To be fair to the few progressive officials in this state, there is too much nihilism from the public side as well. In a society where private self interest prevails, people are quick to jump on the principle of my rights. Unfortunately, we have no good mechanisms for people to share responsibilities, as well as, consider the overall well-being of the community," he said.

"We need to create a new methodology for public involvement in policy making in the state of Hawaii. There are very few forums for policy making that directly involve local citizens and affected communities," he said outlining some principles for community planning:

- Participatory democracy The involvement of many is a functional part of any planning process. The public will not overlook the important social and environmental impacts involved since they are the ones most affected.
- Citizens need to be vested with some sort of real authority in making planning decisions, not just confined to advisory roles.
- Support from the top is absolutely critical. Financial and staff resources for organizing, planning, informing and implementing of a community-based plan are required to implement and monitor the policy and adjust it under new circumstances.

- The biggest failure of leadership in the state of Hawaii has been to exclude the public from the planning and policy making processes.
 - "The buck stops at the top, literally in many instances," he said adding that public planning needs to have a wide-based steering committee that represents a divergent group of people with different points of view. We need to educate the concerned citizens, stakeholders and officers alike in the issues that are being explored."
- Don't produce more studies and lists of recommendations.
- Do come up with specific actions and implement them.
- Lastly, it is tremendously important that we have enlightened leaders with respect for the public and the understanding of the need for citizen involvement, he said in closing.

As a representative of the Green Party, I find it sad that so many of our elected officials and candidates for the governor's office are still living in the past in terms of their understanding and their advocacy of the issues of renewable energy resources and conservation, he said.

Question:

Is there any proactive environmental organization that can represent the environmental concerns and intervene on behalf of the public in the IRP process?

Answer:

Clyde Murley-NRDC

There was an opportunity taken by the NRDC in the HECO IRP process to intervene and strongly support the development of wind and renewable energy in Hawaii. Going beyond that, there is no one comprehensive broad based environmental organization that represents the public interests. Different organizations have different mandates and agendas and are not all looking broadly. There is an opportunity for environmental groups to educate each other and integrate each other's viewpoint into a global platform.

Ira Rohter, Green Party

A stunning example of many people representing a wide spectrum of energy and environmental interests coming together to build a consensus was witnessed last year at the *Energy and Environmental Summit*. Unfortunately, many felt their efforts were thwarted at the legislature this past session by its failure to enact those bills resulting from discussions at the summit.

However, there are mechanisms in place and I think the challenge is to come up with positive economic programs to address public concerns. In other words, we need to get people at the top to start to pay attention and that is, I think, part of what has to happen here.